MATERIALS ON MISSE
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Materials on MISSE

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Materials

International

Space

Station

Experiment

- *MISSE 1*
- *MISSE 2*
- *MISSE 3*
- *MISSE 4*
- *MISSE 5*

MISSE (Materials International Space Station Experiment) Specimens
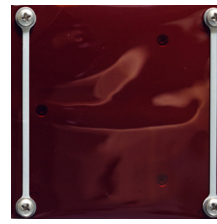
2-K1

Kapton

2-K2

Kapton with 10% by weight
aluminum acetylacetonate (Alacac)

1-year AO plus Solar exposure

1-J11

Kapton

1-J12

Kapton with 10% Alacac

1-J13

Kapton with 15% Alacac
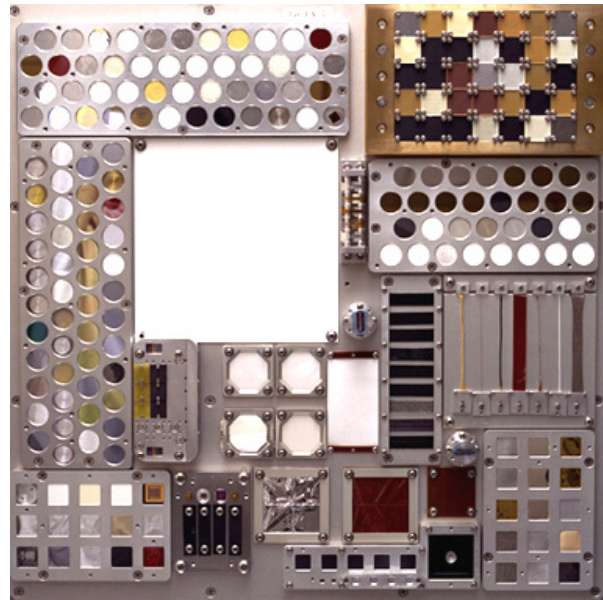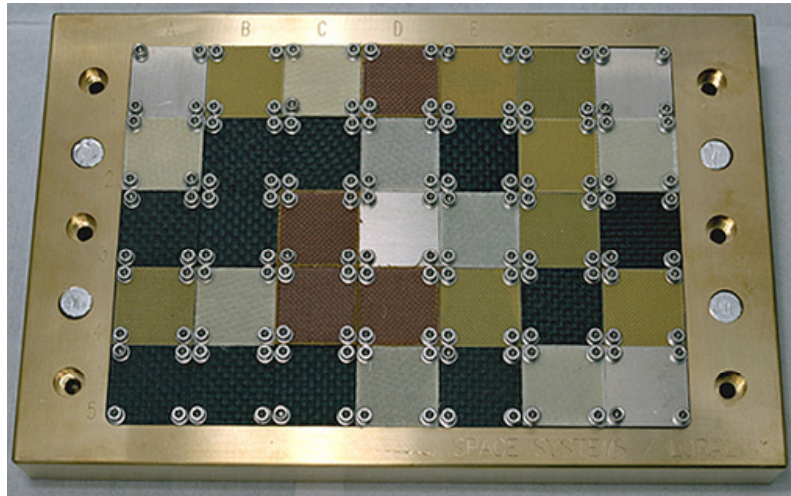
1-year Solar (no AO) exposure

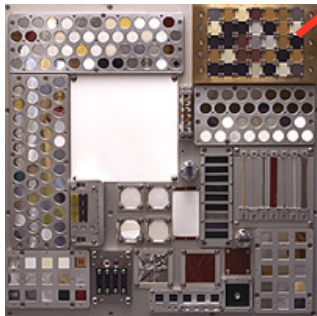# MISSE 1

AO + UV

UV

Materials
International
Space
Station
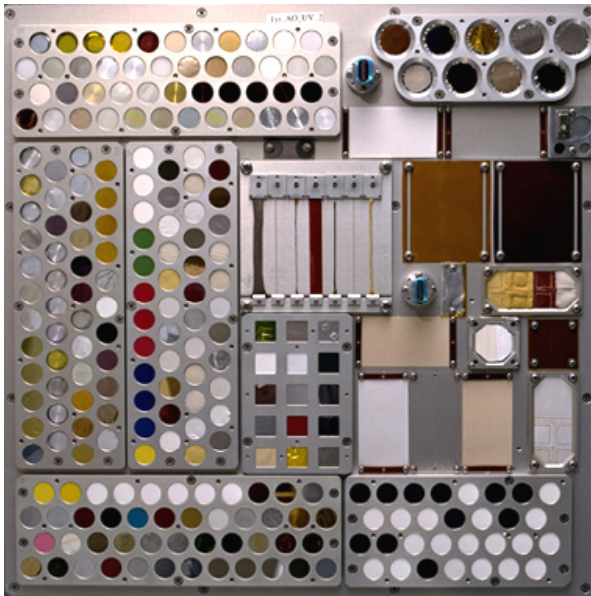**E**xperiment

MISSE 1 - UV

**35 Low Z / high Z / low Z layered
radiation shielding materials
with 4 thermo - luminescence
detector (TLD) stacks - -
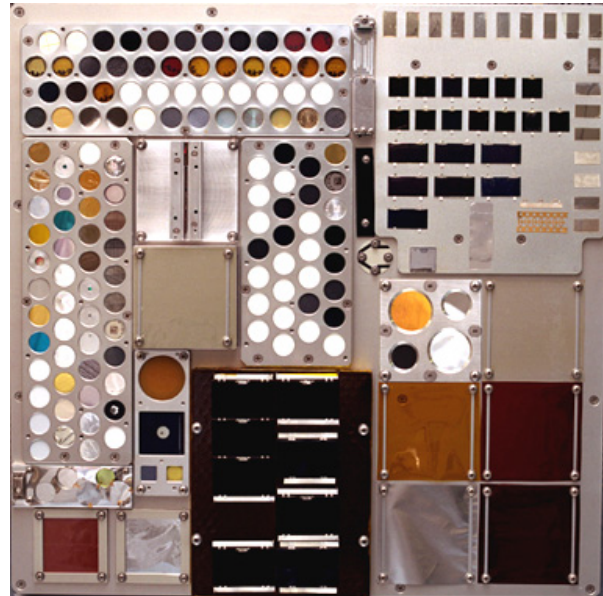Space Systems Loral and
Physical Sciences, Inc.**
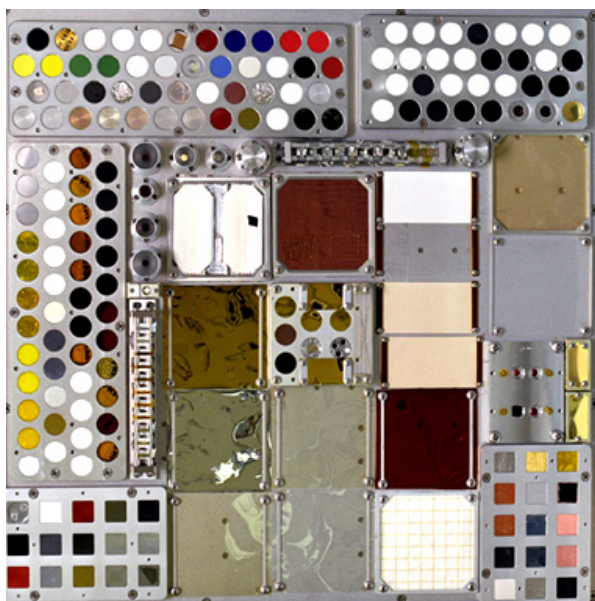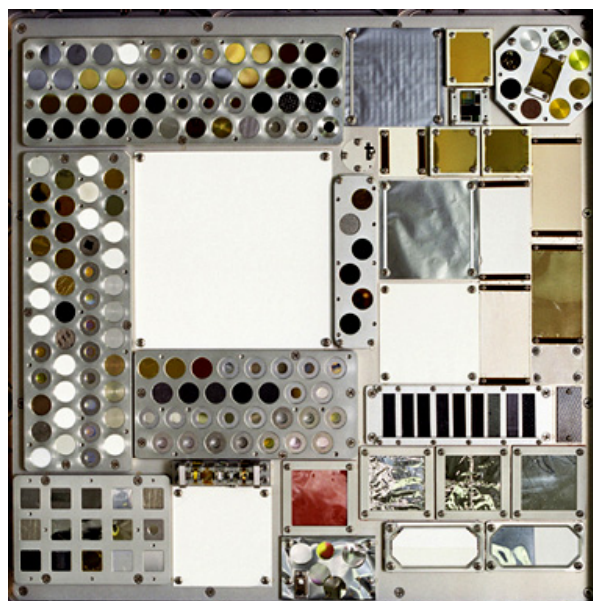
- MISSE is managed by NASA Langley
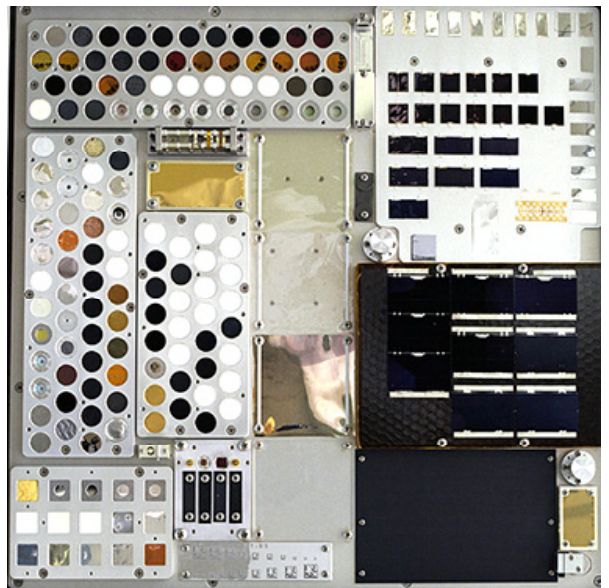
MISSE 2

AO + UV

UV

MISSE 3

AO + UV

UV

MISSE 4

AO + UV

UV

903
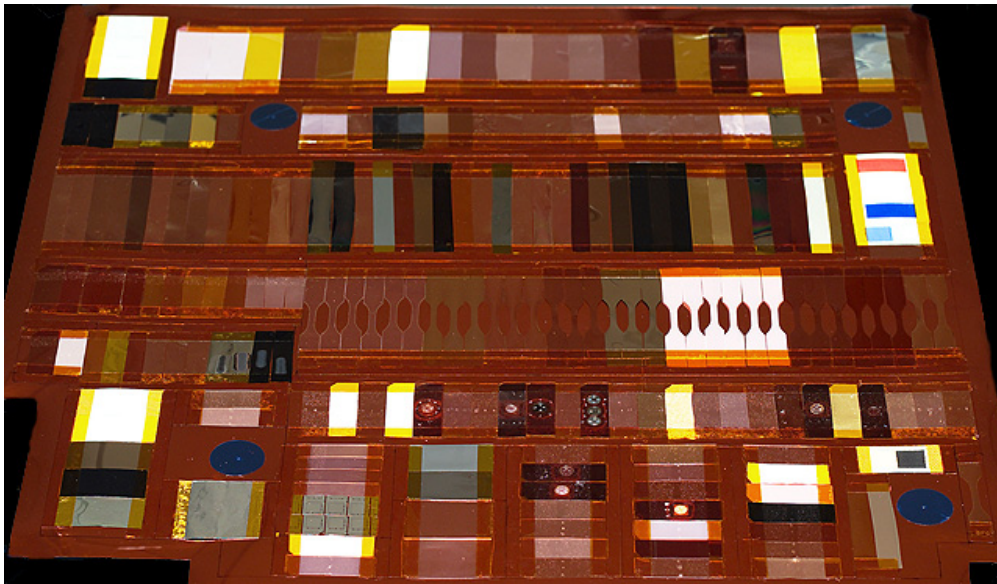
MISSE 5

Boron-Containing Polymers on MISSE 5

Ultem with 20% borane   Pure Ultem
Ultem with 15% borane
Ultem with 10% borane
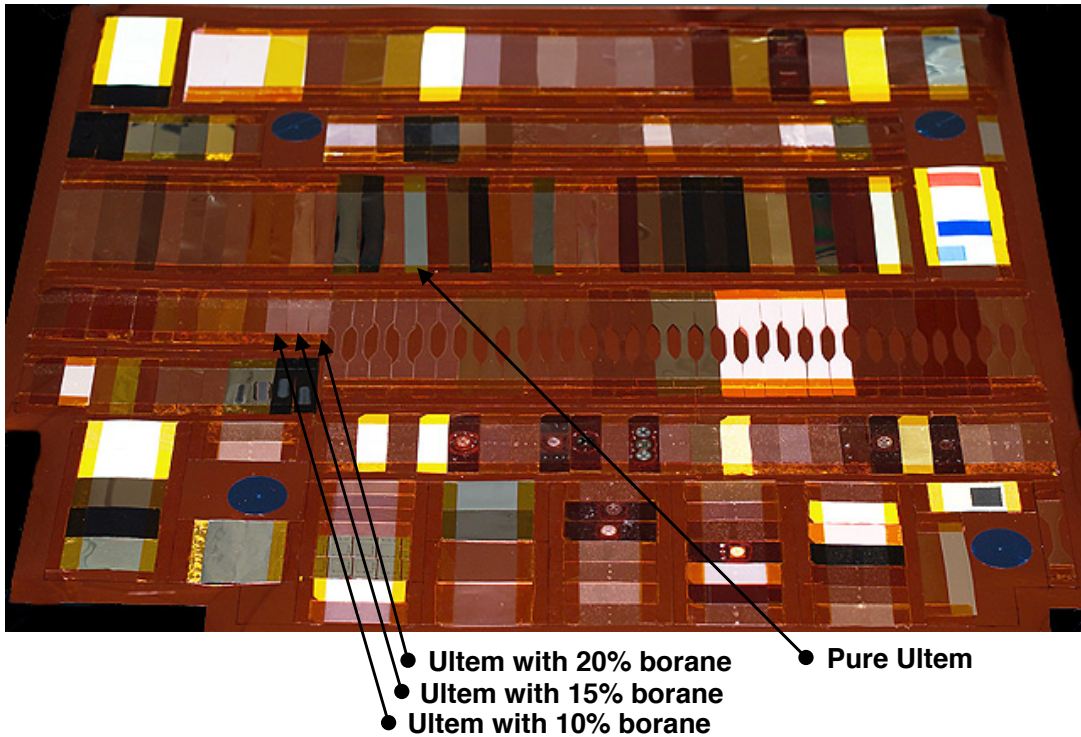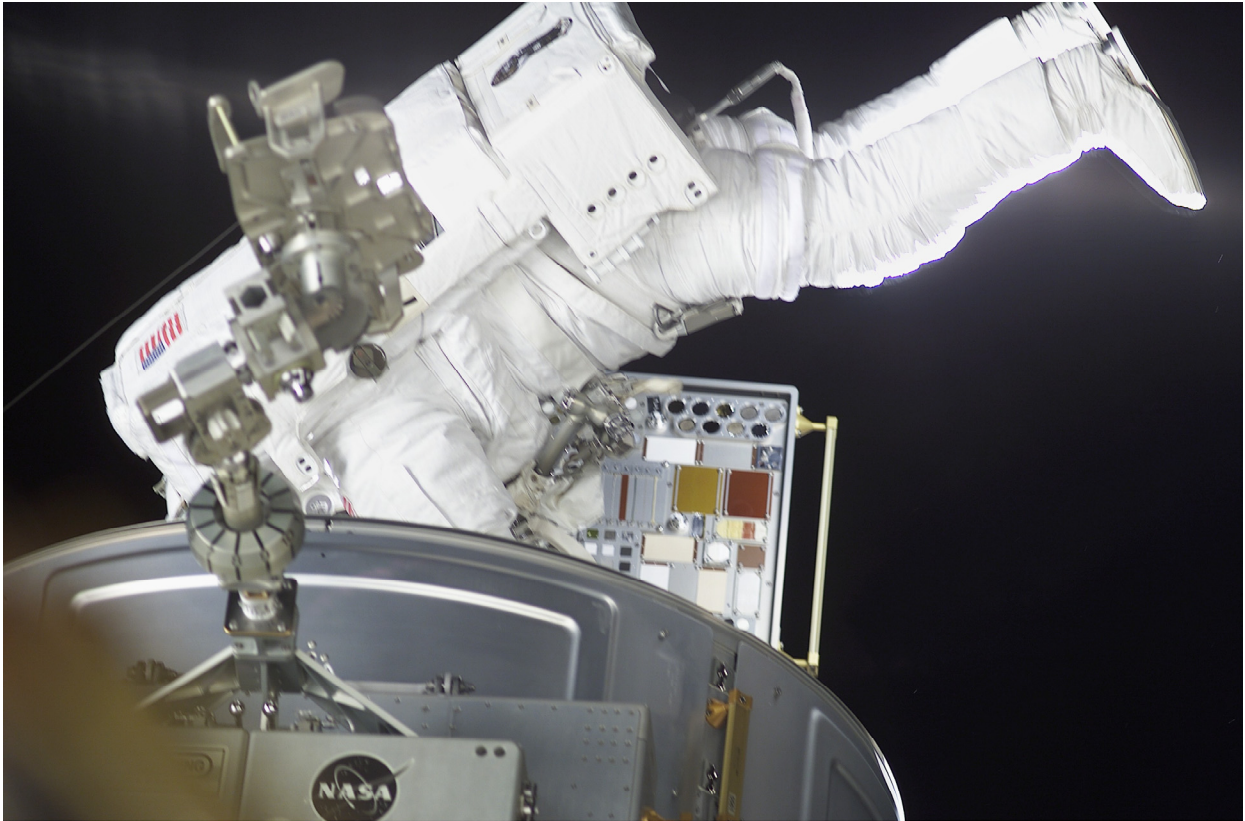
- Films for space-environmental durability testing
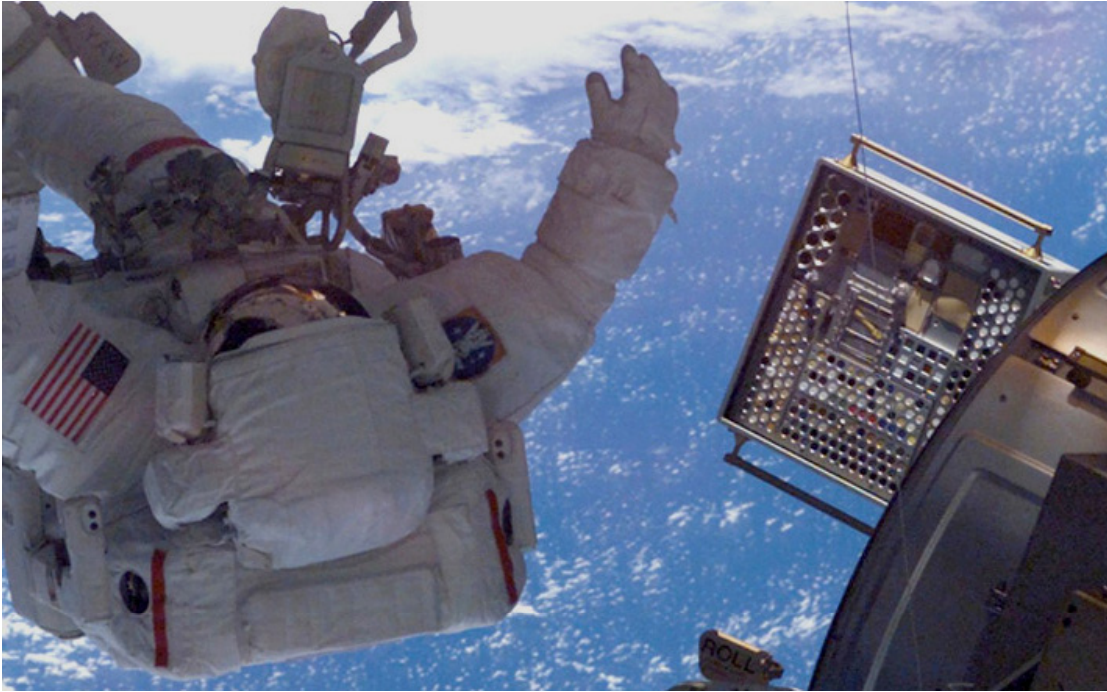
Passive Experiment Carriers
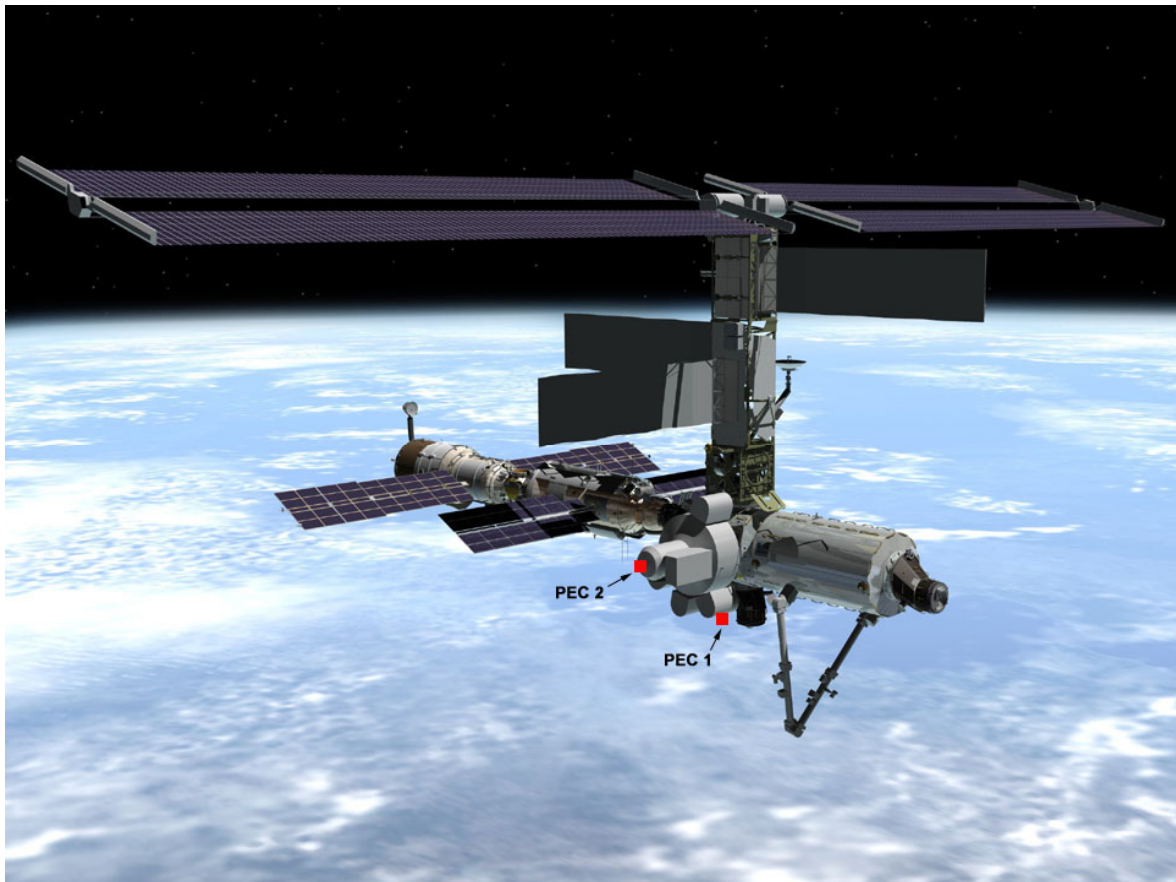
MISSE

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MISSE

MISSE
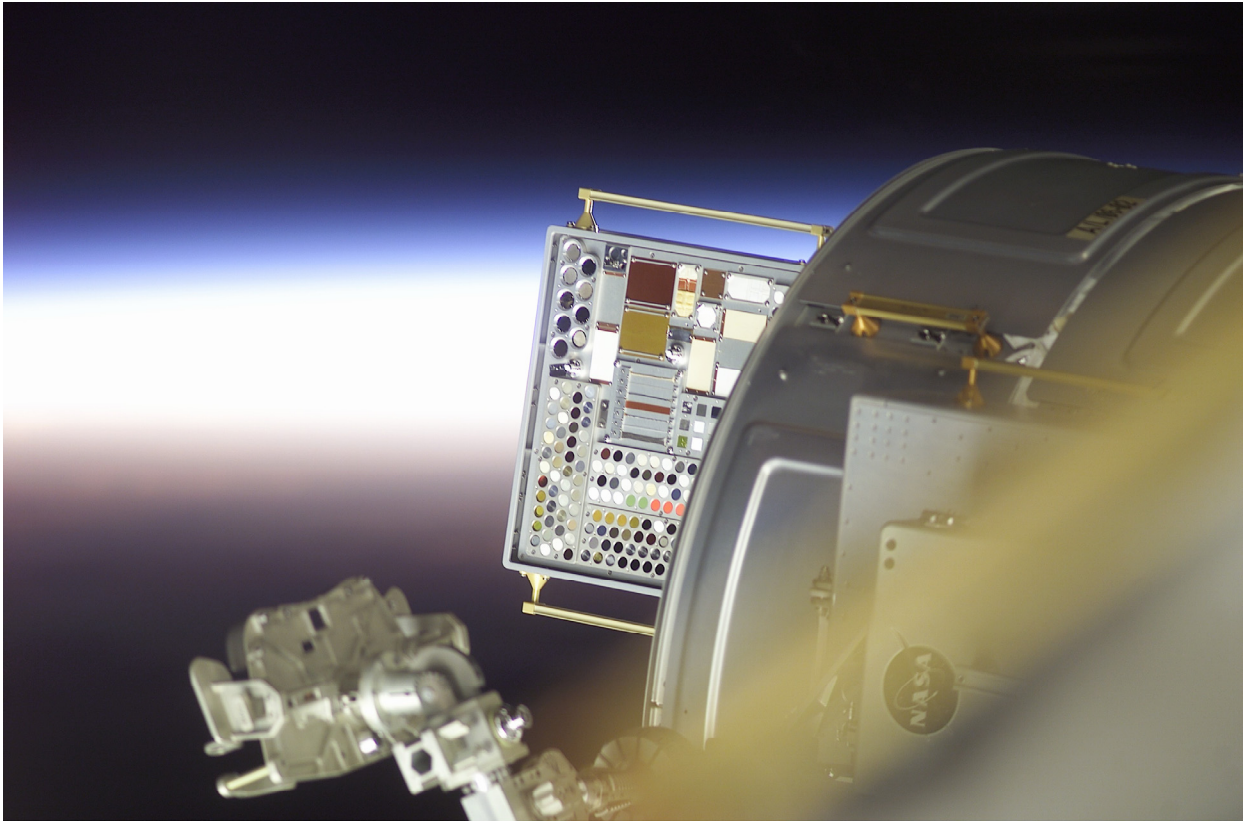
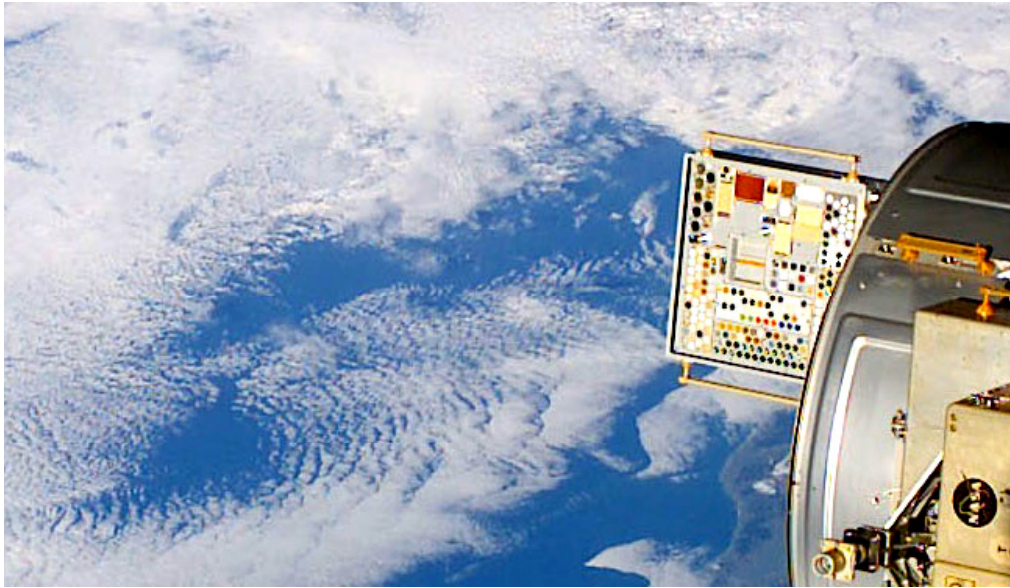S105E5342 2001/08/17 23:00:53

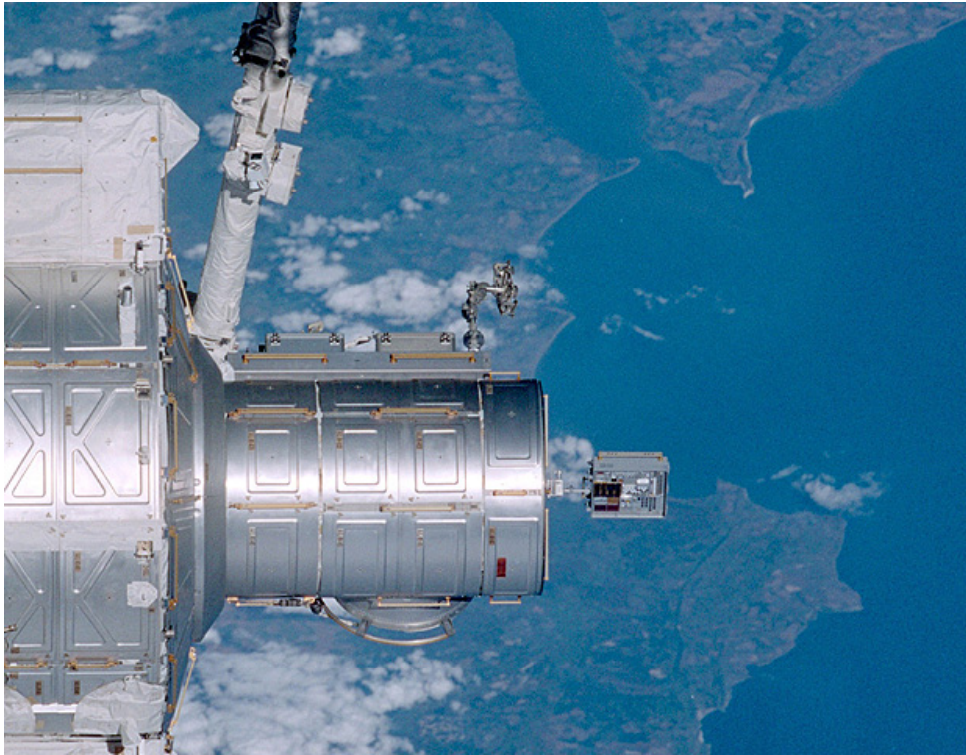909

MISSE

910

MISSE

MISSE

Activities for MISSE

Launched on August 16, 2001
To be retrieved after return to flight

- Investigate and develop improved thin films concepts for durability, radiation shielding, and electrostatic control
- Characterize films for mechanical and other materials properties
- Compile and report data after retrieval and analysis
- Ultimate proof of the performance in the space environments